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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,085	04/21/2005	Petri Silenius	LAIN-089	8291

20374 7590 09/20/2007
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EXAMINER

CORDRAY, DENNIS R

ART UNIT	PAPER NUMBER
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1731

MAIL DATE	DELIVERY MODE
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09/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/532,085

Applicant(s)

SILENIUS ET AL.

Examiner

Dennis Cordray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/21/2005</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

1. Claim 3 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claim recites that the fibrils have an average thickness of 0.1 – 10 μm whereas Claim 2, from which the claim depends, recite an average thickness of less than 5 μm . Claim 3 thus expands, rather than restricts, the previous limitation.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites a method for manufacturing paper and board comprising the step of "using a filler" without further defining how the filler is to be used. For instance, is the filler added to the papermaking furnish, applied to the formed sheet prior to drying, added as a component of a coating applied to the sheet, or used in some other way?

Claim 6 recites the limitation "inorganic salts" in Claim 1. There is insufficient antecedent basis for this limitation in the claim.

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Claim 6 further recites "the proportion of inorganic salts of the weight of the filler," which does not make sense.

The remaining claims ultimately depend from and inherit the indefiniteness of Claim 1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-10 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Silenius et al (WO 02/92909).

Silenius et al discloses method of making a paper comprising adding a filler to a papermaking pulp (p 4, line 26 to p 5, line 2). The filler comprises calcium carbonate, calcium oxalate, calcium sulfate or barium sulfate aggregates (inorganic salt particles) precipitated on cellulose fibrils from an aqueous solution (p 2, lines 12-16; p 3, lines 24-27). The filler comprises cellulose fibrils produced by refining cellulose fibers (plant fibers) and screening into a preferred screened fraction of from P100 -P400, or from 100 to 400 Mesh. Fibrils passing through a 100 Mesh screen will pass through a 50-Mesh screen. The fibrils have a thickness from 0.1-2 μm and a length from 10-400 μm and (p 3, lines 13-23). The fibril dimensions significantly overlap the claimed dimensions.

Silenius et al discloses that the mass ratio of calcium carbonate to fibrils in the filler is from 0.0001-95% by weight. The amount of filler used is 0.1-80% by weight of the paper (p 3, lines 27-31). The composition significantly overlaps the claimed composition.

Silenius discloses that the paper can be coated with a layer having a weight of 5-30 gsm per side (p 5, lines 5-10; p 7, lines 20-22).

Silenius et al discloses that papers produced using the filler have better formation, retention, smoothness and a denser surface than when using commercial precipitated calcium carbonate. Other advantages disclosed include improved cost efficiency (p 2, lines 24-34).

While envelope paper is not explicitly disclosed by Silenius et al, it would have been obvious to one of ordinary skill in the art to make any kind of paper, including

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envelope paper, using the process to achieve the advantages disclosed by Silenius et al. Alternatively, any kind of paper can be made into an envelope.

The paper made by Silenius et al has a substantially identical structure to the paper made by the claimed process and will have the claimed air permeability because, where the claimed and prior art apparatus or product are identical or substantially identical in structure or composition, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). In other words, when the structure recited in the reference is substantially identical to that of the claims, the claimed properties or functions are presumed to be inherent.

"[T]he discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer." *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977).

Note that a rejection based on 35 U.S.C. 102(a) can be overcome by perfecting a claim to priority under 35 U.S.C. 119(a)-(d) by filing a certified priority document in the application and an English language translation, if the document is not in English and the examiner has established that the priority document satisfies the enablement and description requirements of 35 U.S.C. 112, first paragraph.

4. Claims 1-10 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Silenius et al (US 20040173329).

Silenius et al (US 20040173329) discloses identical subject matter to Silenius et al (WO 02/92909), detailed in the previous rejection, thus the detail will not be repeated. The subject matter is disclosed on p 1, pars 9 and 14-19; p 2, pars 23-25; and p 3, par 36.

Making envelope paper would have been obvious to one of ordinary skill in the art for reasons given above.

The paper made will have the claimed air permeability also for reasons previously given.

5. Claims 1-8 and 10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Silenius et al (WO 97/01670).

Silenius et al discloses method of making a paper comprising adding a filler to a papermaking pulp (pp 10-11, Example 2). The filler comprises calcium carbonate aggregates (inorganic salt particles) precipitated on cellulose fibrils from an aqueous solution (p 3, lines 13-19 and 31-33; p 6, lines 19-23). The filler comprises cellulose fibrils produced by refining cellulose fibers (plant fibers) and screening into a preferred screened fraction of from P100 -P400, or from 100 to 400 Mesh. Fibrils passing through a 100 Mesh screen will pass through a 50-Mesh screen. The fibrils have a thickness

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from 0.1-2 μm and a length from 10-400 μm and (p 3, lines 31-37 and p 6, lines 15-18).

The fibril dimensions significantly overlap the claimed dimensions.

Silenius et al claims (Claim 6) that the mass ratio of calcium carbonate to fibrils in the filler is from 13.5-2700%, which corresponds to a ratio, expressed as a percentage, of calcium carbonate/(calcium carbonate + fibrils) of 11.89 to 96.4%. The amount of filler used is 0.1-50% by weight of the paper (p 7, lines 30-32). The composition significantly overlaps the claimed composition.

Silenius discloses that the paper can be coated (p 1, lines 7-9).

Silenius et al discloses that papers produced using the filler have better optical properties and better tensile strength than when using commercial precipitated calcium carbonate. Other advantages disclosed include better filler retention and reducing the grammage of the paper without sacrificing other qualities (p 13, line 10 to p 14, line 6).

Making envelope paper would have been obvious to one of ordinary skill in the art for reasons previously given.

The paper made will have the claimed air permeability for reasons previously given.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silenius et al in view of Silenius (EP-0930345 A2).

Silenius et al do not disclose that the filler can contain calcium oxalate, calcium sulphate, or barium sulphate.

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Silenius (EP-0930345) discloses a filler containing fibrils produced by refining cellulosic fiber and a pigment that can be calcium carbonate, barium sulphate or any known pigment (Abstract, p3, lines 7-9).

The art of The art of Selenius et al, Silenius (EP-0930345) and the instant invention are analogous as pertaining to pigments used in filling paper. It would have been obvious to a person of ordinary skill in the art at the time of the invention to use any of the claimed pigments in the filler for the paper of Selenius et al in view of Silenius (EP-0930345) as a well known and functionally equivalent option.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silenius et al in view of J. Peel (Paper Science & Paper Manufacture).

Silenius et al do not disclose the weight of the coating layer(s).

Peel teaches that typical coated papers known in the art have coating weights from 4-35 gsm per side.

The art of Silenius et al, Peel and the instant invention is analogous as pertaining to making coated papers. It would have been obvious at the time of the invention to one of ordinary skill in the art to apply to the paper a coating layer having the claimed weight per side in the process of Silenius et al in view of J. Peel as a typical range known in the art.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory

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obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 12-18 of copending Application No. 10/475774. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application and those of the copending application are related as genus and species. The paper made by the method of the copending application will have the claimed air permeability for reasons given previously.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

9. Claims 1-8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 12 and 16 of copending Application No. 10/475773. Although the conflicting claims are not identical, they are

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not patentably distinct from each other because the claims of the instant application and those of the copending application are related as genus and species. The paper made by the method of the copending application will have the claimed air permeability for reasons given previously.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10. Claims 1-7 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 12-18 of copending Application No. 10/532481. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application and those of the copending application are related as genus and species. The paper made by the method of the copending application will have the claimed air permeability for reasons given previously.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

11. Claims 1-8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 16-22 and 24 of copending Application No. 11/808273. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application and those of the copending application are related as genus and species. The paper made

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by the method of the copending application will have the claimed air permeability for reasons given previously.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Cordray whose telephone number is 571-272-8244. The examiner can normally be reached on M - F, 7:30 -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


DRC


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